

TECHNICAL DATASHEET

18W Fixed Blade USB-C Charger With Power Delivery 3.0 – UK



Applications

- Mobile Phones
- Networking Devices
- Tablets

Features

- **USB Type-C**
- **Fixed Blade**
- **Ecodesign/ErP Lot 7 (EU) 2019/1782 Compliance**
- **CoC Version 5 Tier 2 Compliance**
- **Complies with USB Power Delivery 3.0**
- **USB Power Delivery 3.0 Certified**
- **Limited Power Source (LPS)**
- **Class B EMI**
- **OVP and short circuit protection**

Safety Standards



Dimensions

84.34 x 40.0 x 29.0 mm

(3.32 x 1.57 x 1.14 inch)

Specifications

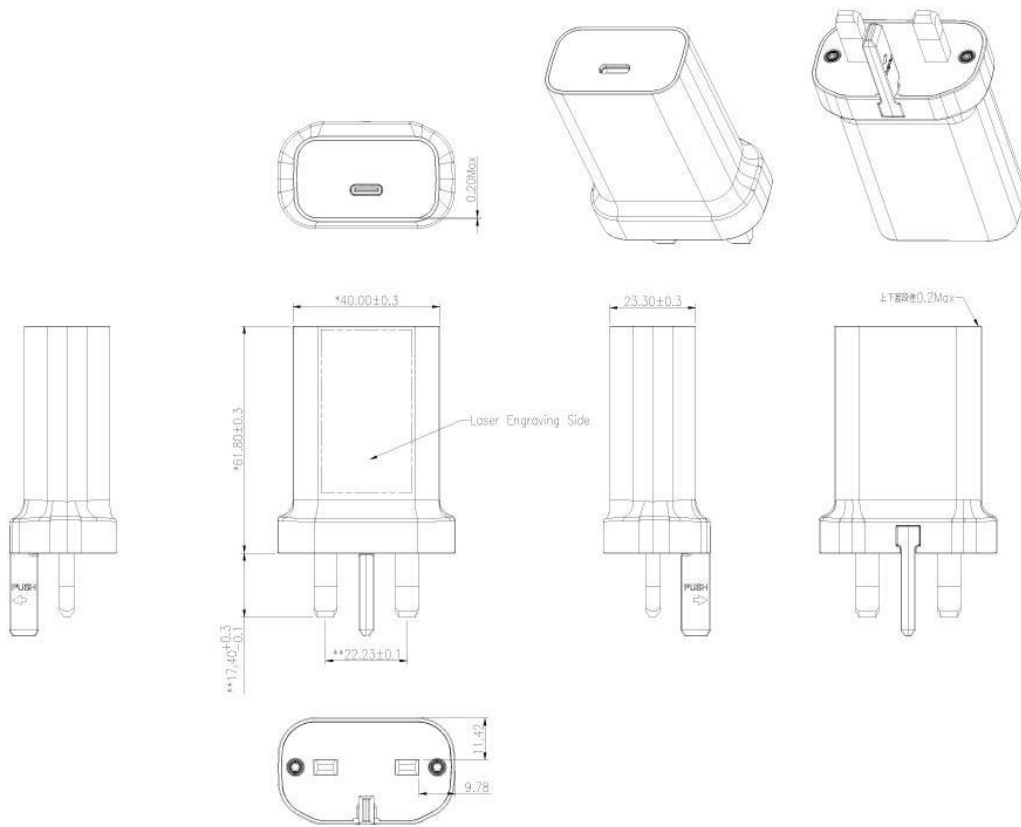
AQ18K Specifications¹

Model		AQ18K-59A-H ²	AQ18K-59CFA-H ²
Output	DC Output Voltage	5.0V/9.0V	5.0V/9.0V/12.0V/15.0V
	Max Current	3.0A/2.0A	3.0A/2.0A/1.5A/1.2A
	Output Power	15W/18W	15.0W/18.0W/18.0W/18.0W
	Regulation	± 5%	
	Ripple & Noise P-P(max) ³	250mV	
Input	AC Input Voltage Range	90 to 264VAC	
	AC Input Frequency	47 to 63Hz	
	Input Current	0.5A(RMS) max at 100VAC	
	No Load Power Consumption at 115VAC Input	0.038W	
	No Load Power Consumption at 230VAC Input	0.052W	
	115VAC Average Efficiency ⁴	5V: 81.89%, 9V: 86.08%	5V: 81.89%, 9V: 86.08% 12V: 86.96%, 15V: 86.54%
	230VAC Average Efficiency ⁴	5V: 81.63%, 9V: 86.42%	5V: 81.63%, 9V: 86.42% 12V: 86.85%, 15V: 87.26%
	230VAC 10% Load Efficiency ⁴	5V: 78.84%, 9V: 83.09%	5V: 78.84%, 9V: 83.09% 12V: 81.29%, 15V: 78.88%
	Leakage Current	100uA max	
Protection	Over-Voltage	5V: 6.25V max, 9V: 11.25V max, 12V: 15V max, 15V: 18.75V max; Auto recover	
	Over-Current	5V: 4.05A max, 9V: 2.7A max, 12V: 2.025A max, 15V: 1.62A max; Auto recover	
	Short Circuit	Auto recover	
	Over Temperature	Latch off	
Environmental	Operating Temperature	0°C to +40°C	
	Non-Operating Temperature	-30° to +70°C	
	Operating Humidity	10 to 90% RH	
Safety Approvals and EMC	Dielectric Withstand (HI-POT)	Primary to Secondary: 3000VAC for 1min, 3mA	
	Insulation Resistance	Primary to Secondary: >100M ohm for 500VDC	
	Standards	IEC 62368-1	
	EMI Emissions	EN 55032/CISPR 32 Class B Conducted and Radiated	
	Harmonic Current Emissions	IEC 61000-3-2	
	Voltage Fluctuations & Flicker	IEC 61000-3-3	
	Immunity	EN 55035/CISPR 35: IEC 61000-4-2 (Contact: ±4KV, Air: ±8KV), IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (± 1kV), IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11	

Mechanical	Dimensions (L x W x H)	84.34mm (3.32in) x 40.0mm (1.57in) x 29.0mm (1.14in)
	DC Output Connector	USB-C
Notes	<ol style="list-style-type: none"> 1. The specifications defined are at ambient temperature of 25°C, unless otherwise specified. 2. Special order item. Minimum order quantity applies. 3. 20MHz bandwidth frequency oscilloscope, add a 0.1μF multilayer Cap. and Low ESR Electrolytic Cap. (10μF) at output connector terminals (nominal line voltage, full load). 4. Efficiency is measured after 30 minutes burn-in 	

Outline Drawing

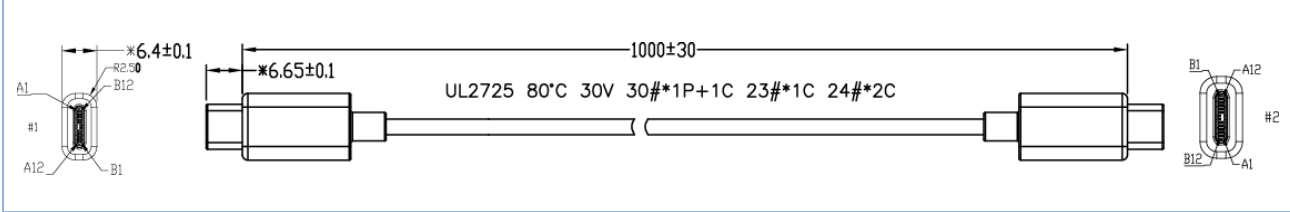
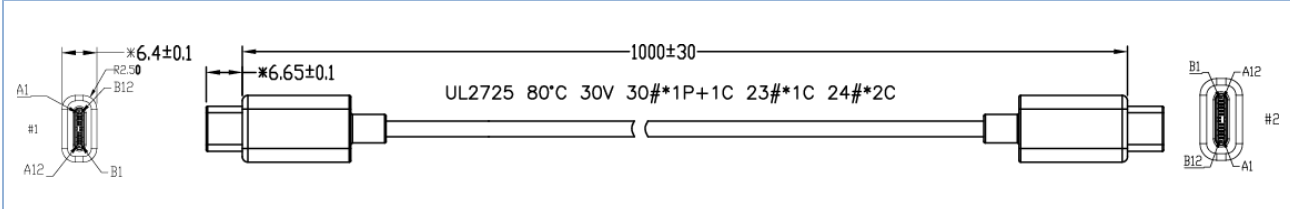
AQ18K Outline Drawing



USB Cables

USB Cables – Sold Separately

Unit: mm

<p>Part no: UES-1001A160</p>	<p>Desc: Low Drop Type-C USB Cable – 1 Meter – 23AWG on Power – 30AWG on Data - Black</p>
	
<p>Part no: UES-1003A160</p>	<p>Desc: Low Drop Type-C USB Cable - 1 Meter – 23AWG on Power – 30AWG on Data - White</p>
	

Phihong Locations



Headquarters Phihong Technology Co., Ltd
 No. 568, Fuxing 3rd Rd., Gueishan Dist., Taoyuan City (33383), Taiwan
 Tel : +886-3-3277288
 Fax : +886-3-3277622
phsales@phihong.com.tw
www.phihong.com.tw



Phihong Technology Co. Ltd. (Tainan R&D Center)
 No. 99, Zhengnan 1st. Street, Yongkang Dist., Tainan City 71046, Taiwan
 Tel : +886-6-254-7588
 Fax : +886-6-254-7288
phsales@phihong.com.tw
www.phihong.com.tw



Phihong China
 Room 101, Building 5, 133-1 Tiesong Road, Qingxi Town, Dong Guan City, Guangdong (523642), China
 Tel : +86-769-87736405
phsales@phihong.com.tw



Phihong USA
 47800 Fremont Blvd., Fremont, CA 94538, U.S.A.
 Tel : +1-510-445-0100
 Fax : +1-510-445-1678
usasales@phihongusa.com
www.phihong.com



Phihong Japan
 PMOEX Nihonbashi Kayabacho 10F, 2-12-10
 Nihonbashi Kayabacho, Chuo City, Tokyo 103-0025 Japan
 Tel : +81-3-6626-5513
 Fax : +81-3-6629-0241
phsales@phihong.com.tw
www.phihong.co.jp



Phihong Vietnam
 Lot CN5 An Duong Industrial Zone, Hong Phong Commune, An Duong County, Hai Phong City, Vietnam
 Tel : +84-22588-31557